

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended) ~~Isolated~~ An isolated anti-freeze protein which can be derived from plants characterised in that at least 40% the amino acids of said isolated anti-freeze protein are from the group of Serine, Threonine and Asparagine and in that said protein has at least 80% overlap with the following amino acid sequence

D-E-Q-P-N-T-I-S-G-S-N-N-T-V-R-S-G-S-K-N-V-L-A-G-N-D-N-T-V-I-S-G-D-N-N-
S-V-S-G-S-N-N-T-V-V-S-G-N-D-N-T-V-T-G-S-N-H-V-V-S-G-T-N-H-I-V-T-D-N-N-
N-N-V-S-G-N-D-N-N-V-S-G-S-F-H-T-V-S-G-G-H-N-T-V-S-G-S-N-N-T-V-S-G-S-N-
H-V-V-S-G-S-N-K-V-V-T-D-A (SEQ ID NO: 1)

as well as modified versions thereof wherein the modification does not materially affect the ice recrystallisation inhibition properties.

Claim 2 (currently amended) ~~Anti-freeze~~ The isolated anti-freeze protein according to claim 1, which can be ~~is~~ derived from grassa plant.

Claim 3 (Cancelled)

Claim 4 (currently amended) Anti-freeze protein of claim 3, wherein the overlap is at least 95%.

Claim 5 (original) Anti-freeze protein of claim 4, wherein the overlap is 100%.

Claim 6 (original) Anti-freeze protein of claim 1, wherein the protein has been modified by glycosylation.

Claim 7 (withdrawn) Nucleic acid sequence capable of encoding for the anti-freeze protein of claim 1.

Claim 8 (withdrawn) Nucleic acid sequence of claim 7, having the sequence (Seq. ID No. 2):

GAT GAA CAG CCG AAT ACG ATT TCT GGG AGC AAC AAT ACT GTC AGA
TCC GGG AGC AAA AAT GTT CTT GCT GGG AAT GAC AAC ACC GTC ATA TCT
GGG GAC AAC AAT AGT GTG TCT GGG AGC AAC AAC ACT GTC GTA AGT
GGG AAT GAC AAT ACC GTA ACC GGC AGC AAC CAT GTC GTA TCA GGG
ACA AAC CAT ATC GTT ACA GAC AAC AAC AAT AAC GTA TCC GGG AAC GAT
AAT AAT GTA TCC GGG AGC TTT CAT ACC GTA TCC GGG GGG CAC AAT ACT
GTG TCC GGG AGC AAC AAT ACC GTA TCT GGG AGC AAC CAC GTT GTA
TCT GGA AGC AAC AAA GTC GTG ACA GAC GCT TAA

and alleles thereof.

Claim 9 (withdrawn) Frozen food product comprising the anti-freeze protein of claim 1.

Claim 10 (withdrawn) Food product according to claim 9, being a frozen confectionery product.

Claim 11 (withdrawn) Method of obtaining an AFP according to claim 1, whereby the AFP is produced by a genetically modified organism.

Claim 12 (withdrawn) Method according to claim 11, wherein the organism is a microorganism or a plant line.

Claim 13 (withdrawn) Plant, capable of expressing the protein of claim 1 and having an increased frost tolerance.

Claim 14 (new) The isolated antifreeze protein according to claim 2 which is derived from a cold-acclimatised grass.

Claim 15 (new) An isolated antifreeze protein which naturally occurs in a plant characterised in that at least 40% of its amino acids are from the group of Serine, Threonine and Asparagine.

Claim 16 (new) The isolated antifreeze protein according to claim 15 which has been isolated from a plant.

Claim 17 (new) The isolated antifreeze protein according to claim 16 which has been isolated from a cold-acclimatised grass.

Claim 18 (new) The isolated antifreeze protein according to claim 15 which is produced recombinantly.